



US008814567B2

(12) **United States Patent**
Zhang et al.

(10) **Patent No.:** **US 8,814,567 B2**
(45) **Date of Patent:** **Aug. 26, 2014**

(54) **DENTAL IMPLANT PROSTHETIC DEVICE
WITH IMPROVED OSSEOINTEGRATION
AND ESTHETIC FEATURES**

(56) **References Cited**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 505 days.

OTHER PUBLICATIONS

(21) Appl. No.: **11/847,476**

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(22) Filed: **Aug. 30, 2007**

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(65) **Prior Publication Data**

US 2008/0050699 A1 Feb. 28, 2008

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Related U.S. Application Data

(63) Continuation-in-part of application No. PCT/US2006/033893, filed on Aug. 30, 2006, and a continuation-in-part of application No. 11/622,171, filed on Jan. 11, 2007, now abandoned, which is a continuation-in-part of application No. 11/420,024, filed on May 24, 2006, now abandoned.

(60) Provisional application No. 60/712,577, filed on Aug. 30, 2005, provisional application No. 60/684,743, filed on May 26, 2005.

(51) **Int. Cl.**
A61C 8/00 (2006.01)

(52) **U.S. Cl.**
USPC **433/173**

(58) **Field of Classification Search**
USPC 433/172–176
See application file for complete search history.

(57) **ABSTRACT**

Dental implants made at least in part of a porous tantalum material for enhancing the osseointegration of the dental implant into surrounding bone. For example, there is provided a dental implant which includes a porous tantalum portion and an outer portion having a color generally replicating the color of natural teeth. The dental implant further comprises a core portion and the porous tantalum portion at least partially surrounds the core portion. An esthetic portion is disposed at least the outer portion and the porous tantalum portion is disposed for at least partially reinforcing the esthetic portion. After implantation of the implant, bone tissue may osseointegrate into the porous tantalum portion to anchor the implant in position within the surrounding bone. Other embodiments of implants are provided, each implant including at least a portion thereof formed of porous tantalum for improved osseointegration.

26 Claims, 4 Drawing Sheets

